

R E M A R K S

Claims 1, 2 and 4-12 are pending in this application. Support for new claims 5-12 is found on pages 4-6 of the present specification as well as in the original claims.

Issues under 35 U.S.C. 103(a)

Claims 1 and 4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshimasa '791 (JP 06-327791) in view of Egashira '227 (USP 5,439,227).

Claim 2 has also been rejected under 35 U.S.C. § 103(a) as being unpatentable Yoshimasa '791 in view of Egashira '227 and further in view of Yamagishi '413 (USP 5,695,413).

The above-noted rejections are traversed for the following reasons.

Present Invention and Its Advantages

The present invention is directed to a two-piece golf ball having a cover with a flexural modulus (F) of 300-500 MPa; a deformation amount (D) of 3.1 - 5.0 mm; and a ratio (F/D) within the range of more than 50 and not more than 125 as recited in claim 1, for example. Employment of the combination of these features results in advantageous properties as evidenced by the

comparative test results shown in Table 3 at page 26 of the specification. In this regard, note that if any of the flexural modulus (F) or all compression deformation amount (D) or ratio (F/D) values are outside the ranges of the present application, disadvantageous inferior properties result. That is, Examples 1 and 2 (present invention) exhibit advantageous flight distance and/or shot feel properties over Comparative Examples 1-3, which fail to employ these features of the present invention. In particular, Comparative Example No. 2 has ball compression deformation amount (D) and ratio (F/D) values outside the ranges of the present invention, resulting in disadvantageous inferior shot feel properties. Comparative Example No. 2 employs ball compression deformation amount (D) and ratio (F/D) values within the acceptable ranges of Yoshimasa '791, which are discussed below.

Distinctions Between Present Invention and Yoshimasa '791

Yoshimasa '791 discloses a two-piece golf ball having a cover with a flexural modulus of 1500-3000 kg/cm² (147-294 MPa) and a ball compression deformation amount in a range of 70-95 (PGA system) (2.54-3.32 mm when applying an initial load of 98 N to a final load of 1275 N).

Yoshimasa '791 fails to disclose or suggest a golf ball having a cover with a flexural modulus in the range of 300-500 MPa as in the present invention. As noted above, an attempt to employ the acceptable ball compression deformation amount feature discloses by Yoshimasa '791 together with a flexural modulus cover feature within the range of the present invention, as in Comparative Example No. 2 in Table 3 of the present specification, results in disadvantageously inferior shot feel properties. Comparative Example No. 2 is an appropriate comparison that establishes that the present invention exhibits unexpected, advantageous properties over the golf ball embodiments disclosed by Yoshimasa '791. Consequently, significant patentable distinctions exist between the present invention and Yoshimasa '791.

Distinctions Between Present Invention and Egashira '227

Egashira '227 discloses a "multi-piece" solid golf ball. Egashira '227 discloses that "two-piece" golf balls have disadvantages at columns 1-2 and states,

"One solution to this problem [associated with two-piece golf balls] is a multi-piece solid golf ball, wherein the ball structure, especially the solid core section is divided into two, three or more layers having varying hardness, specific gravity and radial thickness . . ."

Egashira '227 further discloses comparative test results in Tables 1 and 2 at columns 5-8, wherein Examples 1-5 (multi-piece golf balls) exhibit advantageously improved "impact feel" or "durability" properties over comparison embodiments, including Comparative Examples 4 and 5, which are two-piece golf balls. Egashira '227 further discloses that the cover of the described multi-piece golf balls has a flexural modulus of 200-450 MPa. It is clear from the disclosure of Egashira '227, that the golf balls described therein are designed to be "multi-piece" golf balls, that "two-piece" golf balls exhibit disadvantageous properties, and that the selected features, including flexural modulus properties, are described for use in multi-piece golf balls, not two-piece golf balls.

Egashira '227 fails to disclose or suggest a two-piece golf ball, having the ball compression deformation amount properties (D) as in the present invention. Egashira '227 further fails to disclose or suggest a ratio (F/D) between a cover flexural modulus and ball compression deformation amount, as in the present invention. In fact, Egashira '227 appears to disclose in Comparative Examples 4 and 5 in Tables 1 and 2, two-piece golf balls, that may have cover flexural modulus properties that overlap with the flexural modulus range of the golf ball of the present invention, but which exhibit disadvantageous and

inferior properties when compared to Examples 1-5 (multi-piece golf balls), which correspond to the golf ball embodiments described and preferred by the inventors of Egashira '227. That is, it appears that Egashira '227 actually "teaches away" from employing two-piece golf balls having a cover with a flexural modulus of 200-450 MPa. Consequently, significant patentable distinctions exist between the present invention and Egashira '227.

Inconsistent Features Between Yoshimasa '791 and Egashira '227

Significant inconsistent features exist between Yoshimasa '791 and Egashira '227, which undermine the attempt to combine these documents together. First, as noted above, Egashira '227 describes multi-piece golf balls and discloses that two-piece golf balls exhibit disadvantageous inferior properties, such that the cover flexural modulus properties of the multi-piece golf balls of Egashira '227 are described to be inapplicable to two-piece golf balls. Consequently, the multi-piece golf ball embodiments of Egashira '227 cannot be combined with the two-piece golf ball embodiments of Yoshimasa '791. Further, both Egashira '227 and Yoshimasa '791 fail to recognize the advantageous properties exhibited by the golf ball of the present invention as presented in the Tables of the present

specification, such that there fails to be any adequate suggestion to a person skilled in the art to obtain advantageous properties by attempting to combine selected portions from each of these documents together. Consequently, significant patentable distinctions exist between the present invention and each of Yoshimasa '791 and Egashira '227, whether taken separately or improperly combined.

Distinctions Between Present Invention and Yamagishi '413

Yamagishi '413 discloses a golf ball having a core with a distortion of at least 3.5 mm, preferably 3.5-5.0 mm, as expressed by a distortion under a load of 100 kg as noted at column 2, lines 12-15. Yamagishi '413 further discloses at column 2, lines 39-42 that the cover has a Shore D hardness of 50-63 and a 300% modulus of 15-35 MPa, especially 17-32 MPa.

Yamagishi '413 fails to disclose a two-piece golf ball having a ball compression deformation amount (D) or a ratio (F/D) within the ranges of the golf ball of the present invention. Consequently, Yamagishi '413 fails to recognize the advantages of the present invention as evidenced by the comparative test results discussed above. Yamagishi '413 further fails to make up for the deficiencies described above in connection with Yoshimasa '791 and Egashira '227. Even hypothetically combining Yamagishi '413 with

either of Yoshimasa '791 or Egashira '227 would fail to provide a basis for suggesting the features of the golf ball of the present invention. Therefore, significant patentable distinctions exist between the present invention and Yamagishi '413, whether taken alone or hypothetically combined with either of Yoshimasa '791 or Egashira '227.

It is submitted for the reasons stated above that all the presently pending claims define patentable subject matter, such that the present application should be placed into condition for allowance.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$950.00 is attached hereto.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Andrew D. Meikle (Reg. No. 32,868) at the telephone number of the undersigned below.

Appl. No. 09/932,984

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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Attachment(s) :

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